

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-028152**Date Inspected:** 10-Aug-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** jobsite**CWI Name:** See Body of Report**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

Quality Assurance inspector (QA) Matthew Daggett was at the American Bridge/Flour (ABF) job site at the San Francisco/Oakland Bay Bridge in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

1. Magnetic Particle Testing of Tower Cover Plate Assembly

2. Welding of Deck Access Hole 12W-W116.5-W5 (Side B)

3. Welding of Deck Access Hole 12E-E116.5-E5 (Side A)

Magnetic Particle Testing of Tower Cover Plate Assembly

The QA inspector at the request of Bill Levell performed Magnetic Particle Testing of the welds joining the Tower Cover Plate Assembly to Dehumidifier Pipes, 25A Mechanical Brackets and 25D Mechanical Brackets. This QAI performed testing of 10% of the total linear length of weld tested by ABF Quality Control Technicians. Testing was performed using a Parker Research DA-400, on AC polarity, continuous magnetism. Please see the Magnetic Particle Test Report dated 8/10/12 for further information. No rejectable indications were noted.

Deck Access Hole 12E-PP116.5-E5

The QA inspector periodically observed the in process Flux Cored Arc Welding (FCAW-G) being performed by

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ABF welding personnel Jin Pai Wang (7299) on Deck access hole 12E-PP116.5-E5 circumference weld. The welder is in the process of placing the fill passes at this time with approximately 80% being completed at the end of the shift. QC inspector Fred Michels was noted to be present in order to monitor the progress and ensure the welding was within the established Welding Procedure Specification (WPS) noted as ABF-WPS-D15-3040-A1 and supporting Procedure Qualification Records (PQR). Prior to initiating the welding at this location the QC inspector observed the preheat temperature using a Raytek non-contact Thermometer was sufficient and compliant to the above-mentioned WPS. Using a Tempil Stick (temperature indicating crayon) the preheat and interpass temperature was then verified by this QA inspector to be greater than 150F and the parameters using a Fluke brand Tong style meter was verified to be 265 amps, 23.3 volts. The work progressed throughout the shift and appeared to be in general conformance with the contract documents. See digital photo included in the body of this report for general information.

Deck Access Hole 12W-W116.5-W5 (Side B)

The QA inspector noted and periodically observed ABF welder Roby Smith (4245) performing the back gouging and grinding operations on Side B of Deck Access Hole 12W-W116.5-W5 . QC inspector Chris Concha was noted to be in the vicinity in order to monitor the progression of work, perform in process visual inspection and ensure the work was being performed in general conformance with the contract documents. The work was not completed on this date and appeared to be progressing in general conformance with the contract documents.



Summary of Conversations:

There were general conversations with Quality Control Inspector Chris Cocha, at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift. All observations were relayed to Bill Levell.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510 385 5910, who represents the Office of Structural Materials for your project.

Inspected By: Daggett, Matt

Quality Assurance Inspector

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Reviewed By: Levell,Bill

QA Reviewer